

*Data Sheet: A 1.2*

## Hot strip mill product tolerances

### Hot Rolled Strip in Coil

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#### General description

This document describes the tolerances for width, thickness, flatness, camber and coil appearance to which ArcelorMittal South Africa produces hot strip mill products. Tolerances are based on EN 10051 or ASTM A568M/635M. When hot rolled strip is produced in accordance with JIS or any other international specification, tolerances in accordance with that particular specification will apply.

Tolerances are grouped into seven classes based on specification and yield strength:

Class 1: EN 10051 Category CF: Hot rolled low carbon steel sheet/plate and strip for cold forming

Class 2: EN 10051 Category A:  $Re \leq 300$  MPa

Class 3: EN 10051 Category B:  $300 \text{ MPa} < Re \leq 360$  MPa

Class 4: EN 10051 Category C:  $360 \text{ MPa} < Re \leq 420$  MPa

Class 5: EN 10051 Category D:  $420 \text{ MPa} < Re \leq 900$  MPa

Class 6: ASTM A568M/635M C-Mn steel

Class 7: ASTM A568M/635M HSLA Steel

For further information, contact:

ArcelorMittal South Africa, PO Box 2, Vanderbijlpark 1900. Toll free number 0800 005043

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## Product Classification

Quality	Tolerance Class						
	Class 1	Class 2	Class 3	Class 4	Class 5	Class 6	Class 7
22MNB5 AMSA HR			X				
ABS SHIP PLATE GR A		X				X	
ABS/LLOYDS GRA		X				X	
API 5L L245/GR B						X	
API 5L L290/X42							X
API 5L L360/X52							X
API 5L L390/X56							X
API 5L L415/X60							X
API 5L L450/X65							X
ASTM A283-03 GR C						X	
COMMERCIAL QUALITY		X					
EN 10025-2-S235		X					
EN 10025-2-S275		X					
EN 10025-2-S355			X				
EN 10025-5-S355J0WP+AR			X				
EN 10028-2-P235GH+AR		X					
EN 10028-2-P265GH+AR		X					
EN 10028-2-P295GH+AR		X					
EN 10028-3 P355GH+AR			X				
EN 10028-2 16MO3		X					
EN 10028-5 P355M			X				
EN 10111 DD11 - DD14	X						
EN10120 P265NB		X					
EN 10219-1 S275 JOH (YS275 TUBE)		X					
EN 10219-1 S355MH (S355 TUBE)			X				
LLOYDS SHIP PLATE GR A		X					
SAE 1006 - SAE 1018						X	
SAE 1030 (CT625)						X	
SANS 1350			X				
SUPRAFORM HR 190	X						
SUPRAFORM HR 220	X						
SUPRAFORM HR 250		X					
SUPRAFORM HR 290 (S.010)		X					
SUPRAFORM 315MC/EN 10149-2 S315MC			X				
SUPRAFORM 355MC/EN 10149-2 S355MC			X				
SUPRAFORM 420MC/EN 10149-2 S420MC				X			
SUPRAFORM 460MC/EN10149-2 S460MC					X		
SUPRAFORM 550MC/EN10149-2 S550MC					X		
SUPRAFORM 700MC/EN10149-2 S700MC					X		
WEARPLATE 200			X				

### Mill Run Material

The specified values for tolerances on mill run coils shall not apply to the uncropped ends of a coil for a total length  $l$ , which is calculated using the formula:

$$l \text{ (m)} = \frac{90}{\text{Nominal thickness (mm)}}$$

provided that the result does not exceed 20 m.

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## Tolerances

### 1. Thickness

The thickness is measured at any point in the length of the coil (excluding uncropped front and tail ends as defined above), not less than 40mm from the untrimmed edge and 25mm from a side trimmed edge.

Note:

1. For patterned floor plate (VASTRAP®) the thickness tolerances are increased by 25%
2. Material thicker than 16mm on enquiry only
3. When orders are placed with ordered thickness as maximum, double the value stated in the tables is subtracted from the ordered thickness to calculate the minimum thickness.
4. When orders are placed with ordered thickness as minimum, double the value stated in the tables is added to the ordered thickness to calculate the maximum thickness.

#### Class 1: EN 10051 Hot rolled low carbon steel sheet/plate and strip for cold forming

Width w (mm)	Tolerance over and under nominal thickness <i>t</i> (mm)										
	<i>t</i> ≤ 2,0	2,0 < <i>t</i> ≤ 2,5	2,5 < <i>t</i> ≤ 3,0	3,0 < <i>t</i> ≤ 4,0	4,0 < <i>t</i> ≤ 5,0	5,0 < <i>t</i> ≤ 6,0	6,0 < <i>t</i> ≤ 8,0	8,0 < <i>t</i> ≤ 10,0	10,0 < <i>t</i> ≤ 11		
800 ≤ w ≤ 1200	0,13	0,14	0,15	0,17	0,18	0,20	0,22	0,24	0,24		
1200 < w ≤ 1500	0,14	0,15	0,17	0,18	0,20	0,21	0,23	0,25	0,25		
1500 < w ≤ 1800	0,16	0,17	0,18	0,20	0,21	0,22	0,23	0,25	0,25		
1800 < w ≤ 1925	-	0,19	0,20	0,20	0,22	0,23	0,26	0,28	0,28		

#### Class 2: EN 10051 Category A: Re ≤ 300 MPa

Width w (mm)	Tolerance over and under nominal thickness <i>t</i> (mm)										
	<i>t</i> ≤ 2,0	2,0 < <i>t</i> ≤ 2,5	2,5 < <i>t</i> ≤ 3,0	3,0 < <i>t</i> ≤ 4,0	4,0 < <i>t</i> ≤ 5,0	5,0 < <i>t</i> ≤ 6,0	6,0 < <i>t</i> ≤ 8,0	8,0 < <i>t</i> ≤ 10,0	10,0 < <i>t</i> ≤ 12,5	12,5 < <i>t</i> ≤ 15,0	15,0 < <i>t</i> ≤ 25,0
800 ≤ w ≤ 1200	0,17	0,18	0,20	0,22	0,24	0,26	0,29	0,32	0,35	0,37	0,40
1200 < w ≤ 1500	0,19	0,21	0,22	0,24	0,26	0,28	0,30	0,33	0,36	0,38	0,42
1500 < w ≤ 1800	0,21	0,23	0,24	0,26	0,28	0,29	0,31	0,34	0,37	0,40	0,45
1800 < w ≤ 1925	-	0,25	0,26	0,27	0,29	0,31	0,35	0,40	0,43	0,46	0,50

#### Class 3: EN 10051 Category B: 300 MPa < Re ≤ 360 MPa

Width w (mm)	Tolerance over and under nominal thickness <i>t</i> (mm)										
	<i>t</i> ≤ 2,0	2,0 < <i>t</i> ≤ 2,5	2,5 < <i>t</i> ≤ 3,0	3,0 < <i>t</i> ≤ 4,0	4,0 < <i>t</i> ≤ 5,0	5,0 < <i>t</i> ≤ 6,0	6,0 < <i>t</i> ≤ 8,0	8,0 < <i>t</i> ≤ 10,0	10,0 < <i>t</i> ≤ 12,5	12,5 < <i>t</i> ≤ 15,0	15,0 < <i>t</i> ≤ 25,0
800 ≤ w ≤ 1200	0,20	0,21	0,23	0,25	0,28	0,30	0,33	0,37	0,40	0,43	0,46
1200 < w ≤ 1500	0,22	0,24	0,25	0,28	0,30	0,32	0,35	0,38	0,41	0,44	0,48
1500 < w ≤ 1800	0,24	0,26	0,28	0,30	0,32	0,33	0,36	0,39	0,43	0,46	0,52
1800 < w ≤ 1925	-	0,29	0,30	0,31	0,33	0,36	0,40	0,46	0,49	0,53	0,58

#### Class 4: EN 10051 Category C: 360 MPa < Re ≤ 420 MPa

Width w (mm)	Tolerance over and under nominal thickness <i>t</i> (mm)										
	<i>t</i> ≤ 2,0	2,0 < <i>t</i> ≤ 2,5	2,5 < <i>t</i> ≤ 3,0	3,0 < <i>t</i> ≤ 4,0	4,0 < <i>t</i> ≤ 5,0	5,0 < <i>t</i> ≤ 6,0	6,0 < <i>t</i> ≤ 8,0	8,0 < <i>t</i> ≤ 10,0	10,0 < <i>t</i> ≤ 12,5	12,5 < <i>t</i> ≤ 15,0	15,0 < <i>t</i> ≤ 25,0
800 ≤ w ≤ 1200	0,22	0,23	0,26	0,29	0,31	0,34	0,38	0,42	0,46	0,48	0,52
1200 < w ≤ 1500	0,25	0,27	0,29	0,31	0,34	0,36	0,39	0,43	0,47	0,49	0,55
1500 < w ≤ 1800	0,27	0,30	0,31	0,34	0,36	0,38	0,40	0,44	0,48	0,52	0,60
1800 < w ≤ 1925	-	0,33	0,34	0,35	0,38	0,40	0,46	0,52	0,56	0,60	0,65

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Class 5: EN 10051 Category D: 420 MPa < Re ≤ 900 MPa

Width w (mm)	Tolerance over and under nominal thickness t (mm)										
	t ≤ 2,0	2,0 < t ≤ 2,5	2,5 < t ≤ 3,0	3,0 < t ≤ 4,0	4,0 < t ≤ 5,0	5,0 < t ≤ 6,0	6,0 ≤ t ≤ 8,0	8,0 < t ≤ 10,0	10,0 < t ≤ 12,5	12,5 < t ≤ 15,0	15,0 < t ≤ 25,0
800 ≤ w ≤ 1200	0,24	0,25	0,28	0,31	0,34	0,36	0,41	0,45	0,49	0,52	0,56
1200 < w ≤ 1500	0,27	0,29	0,31	0,34	0,36	0,39	0,42	0,46	0,50	0,53	0,59
1500 < w ≤ 1800	0,29	0,32	0,34	0,36	0,39	0,41	0,43	0,48	0,52	0,56	0,63
1800 < w ≤ 1925	-	0,35	0,36	0,38	0,41	0,43	0,49	0,56	0,60	0,64	0,70

Class 6: ASTM A568M/635M C-Mn steel

Width w (mm)	Tolerance over and under nominal thickness t (mm)										
	t ≤ 2,0	2,0 < t ≤ 2,5	2,5 < t ≤ 3,0	3,0 < t ≤ 4,0	4,0 < t < 4,5	4,5 ≤ t < 6,0	6,0 ≤ t ≤ 8,0	8,0 < t ≤ 10,0	10,0 < t ≤ 12,5	12,5 < t ≤ 16,0	16,0 < t ≤ 25,0
800 ≤ w ≤ 1200	0,15	0,17	0,20	0,20	0,20	0,23	0,30	0,32	0,35	0,38	0,40
1200 < w ≤ 1500	0,17	0,17	0,20	0,20	0,20	0,25	0,30	0,35	0,38	0,40	0,42
1500 < w ≤ 1800	0,17	0,20	0,20	0,20	0,20	0,28	0,32	0,38	0,40	0,45	0,48
1800 < w ≤ 1925	0,17	0,20	0,20	0,20	0,20	0,30	0,36	0,40	0,45	0,48	0,50

Class 7: ASTM A568M/635M HSLA Steel

Width w (mm)	Tolerance over and under nominal thickness t (mm)										
	t ≤ 2,0	2,0 < t ≤ 2,5	2,5 < t ≤ 3,0	3,0 < t ≤ 4,0	4,0 < t < 4,5	4,5 ≤ t < 6,0	6,0 ≤ t ≤ 8,0	8,0 < t ≤ 10,0	10,0 < t ≤ 12,5	12,5 < t ≤ 16,0	16,0 < t ≤ 25,0
800 ≤ w ≤ 1200	0,17	0,20	0,23	0,23	0,23	0,25	0,30	0,32	0,35	0,38	0,40
1200 < w ≤ 1500	0,17	0,20	0,25	0,25	0,25	0,25	0,30	0,35	0,38	0,40	0,42
1500 < w ≤ 1800	0,20	0,23	0,27	0,27	0,27	0,28	0,32	0,38	0,40	0,45	0,48
1800 < w ≤ 1925	0,20	0,23	0,30	0,30	0,30	0,30	0,36	0,40	0,45	0,48	0,50

2. Width

2.1. Side Trimmed Coils

Class 1-5: EN 10051 Width tolerance for Side trimmed coils

Width w (mm)	Tolerance (mm)
800 ≤ w ≤ 1 200	-0 + 3
1 200 < w ≤ 1 850	-0 + 5
1 200 < w ≤ 1 850	-0 + 6

Class 6-7: ASTM A568M/635M Width tolerance for Side trimmed coils

Width w (mm)	Tolerance (mm)
800 ≤ w ≤ 1 200	-0 + 5
1 200 < w ≤ 1 500	-0 + 6
1 500 < w ≤ 1 850	-0 + 8
1 800 < w ≤ 1 925	-0 + 10

2.1. Mill Edge Coils

The width tolerance on all mill edge coils is -0mm +25mm.

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### 3. Flatness

Flatness is the maximum deviation from a horizontal flat surface in 1 000mm length expressed in either millimetres or in I-units.

I-unit =  $0,25 (H/L)^2$  where H = wave height in millimetres (mm) and L = wave length in metres (m)

Flatness tolerances are only applicable to cut sheet / plate.

As various factors influence flatness, the following tables will distinguish between:

- Temper rolling required/not required or specified/not specified
- Strength level of the steel
- Levelling equipment (Close centre machines with adjustable backup levellers)
- Flattening equipment (all other machines)

#### 4.1 Levelling equipment

Class 1-2: Flatness tolerances for steels with a minimum specified yield strength  $R_e \leq 300$  MPa.

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925		800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
1,2 < t ≤ 2,0	18	81	20	100	25	156	14	49	15	56	19	90
2,0 < t ≤ 6,0	15	56	18	81	23	132	11	30	14	49	17	72
6,0 < t ≤ 25,0	15	56	18	81	23	132	-	-	-	-	-	-

Class 3: Flatness tolerances for steels with a minimum specified yield strength  $300 \text{ MPa} < R_e \leq 360$  MPa.

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925		800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
2,0 ≤ t ≤ 6,0	18	81	23	132	28	196	14	49	17	72	21	110
6,0 < t ≤ 25,0	18	81	23	132	28	196	-	-	-	-	-	-

Class 4: Flatness tolerances for steels with a minimum specified yield strength  $360 \text{ MPa} < R_e \leq 420$  MPa

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925		800 ≤ w ≤ 1200		1200 < w ≤ 1500		1500 < w ≤ 1925	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
2,0 ≤ t ≤ 6,0	23	132	30	225	38	361	17	72	23	132	29	210
6,0 < t ≤ 25,0	23	132	30	225	38	361	-	-	-	-	-	-

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Class 5: Flatness tolerances for steels with a minimum specified yield strength  $420 \text{ MPa} < R_e \leq 900 \text{ MPa}$ .

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$		$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$2,0 \leq t \leq 6,0$	28	196	38	361	45	506	21	110	29	210	34	289
$6,0 < t \leq 25,0$	28	196	38	361	45	506	-	-	-	-	-	-

Class 6: ASTM A568M/635M C-Mn steel

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled (40%)						Temper Rolled (100%)					
	$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$		$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$1,5 < t \leq 4,5$	18	81	24	144	30	225	15	56	20	100	25	156
$4,5 < t < 6,0$	18	81	24	144	30	225	15	56	20	100	25	156
$6,0 \leq t \leq 25,0$	18	81	24	144	30	225	-	-	-	-	-	-

Class 7: ASTM A568M/635M HSLA Steel

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled (40%)						Temper Rolled (100%)					
	$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$		$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$1,5 < t \leq 4,5$	30	225	36	324	48	576	20	100	30	225	40	400
$4,5 < t < 6,0$	30	225	36	324	48	576	20	100	30	225	40	400
$6,0 \leq t \leq 25,0$	30	225	36	324	48	576	-	-	-	-	-	-

## 4.2 Flattening equipment

Class 1-2: Flatness tolerances for steels with a minimum specified yield strength  $R_e \leq 300 \text{ MPa}$ .

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$		$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$1,2 < t \leq 2,0$	27	182	30	225	38	361	20	100	23	132	29	210
$2,0 < t \leq 6,0$	23	132	27	182	35	306	17	72	20	100	26	169
$6,0 < t \leq 25,0$	23	132	27	182	35	306	-	-	-	-	-	-

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Class 3: Flatness tolerances for steels with a minimum specified yield strength  $300 \text{ MPa} < R_e \leq 360 \text{ MPa}$ .

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$		$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$2,0 \leq t \leq 6,0$	27	182	35	306	42	441	20	100	26	169	32	256
$6,0 < t \leq 25,0$	27	182	35	306	42	441	-	-	-	-	-	-

Class 4: Flatness tolerances for steels with a minimum specified yield strength  $360 \text{ MPa} < R_e \leq 420 \text{ MPa}$

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$		$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$2,0 \leq t \leq 6,0$	35	306	45	506	57	812	26	169	34	289	43	462
$6,0 < t \leq 25,0$	35	306	45	506	57	812	-	-	-	-	-	-

Class 5: Flatness tolerances for steels with a minimum specified yield strength  $420 \text{ MPa} < R_e \leq 900 \text{ MPa}$ .

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$		$800 \leq w \leq 1200$		$1200 < w \leq 1500$		$1500 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$2,0 \leq t \leq 6,0$	42	441	57	812	68	1156	36	324	43	462	51	650
$6,0 < t \leq 25,0$	42	441	57	812	68	1156	-	-	-	-	-	-

Class 6: ASTM A568M/635M C-Mn steel

Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$		$800 \leq w \leq 1500$		$1500 < w \leq 1800$		$1800 < w \leq 1925$	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
$1,5 < t \leq 4,5$	23	132	30	225	38	361	18	81	24	144	30	225
$4,5 < t < 6,0$	23	132	30	225	38	361	18	81	24	144	30	225
$6,0 \leq t \leq 25,0$	23	132	30	225	38	361	-	-	-	-	-	-

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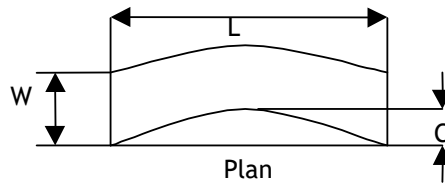
Thickness t (mm)	Flatness Tolerance (mm) [ I-units ] for width w (mm)											
	Not Temper Rolled						Temper Rolled					
	800 ≤ w ≤ 1500		1500 < w ≤ 1800		1800 < w ≤ 1925		800 ≤ w ≤ 1500		1500 < w ≤ 1800		1800 < w ≤ 1925	
	mm	I-Unit	m	I-Unit	m	I-unit	m	I-Unit	m	I-Unit	m	I-Unit
1,5 < t ≤ 4,5	30	225	45	506	60	900	24	144	36	324	48	576
4,5 < t < 6,0	30	225	45	506	60	900	24	144	36	324	48	576
6,0 ≤ t ≤ 25,0	30	225	45	506	60	900	-	-	-	-	-	-

4. Camber

Camber is the deviation of a side edge on the coil from a straight line. This measurement is being taken on the concave side with a straight edge.

Figure 2

W is the width  
L is the length  
C is the edge camber



Class 1 - 5 (EN 10051)

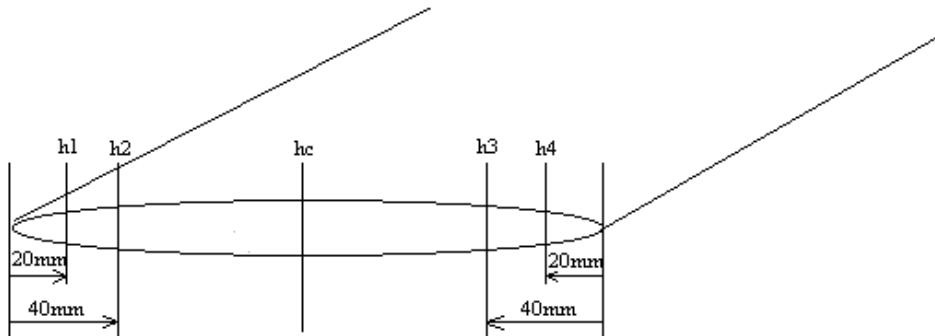
A maximum camber of 20mm in any 5 000mm is permissible in coils.

Class 6 - 7 (ASTM A568/A635)

A maximum camber of 25mm in any 6 000mm is permissible in coils.

5. Strip Profile

Crown, wedge and edge-drop are measured at the positions indicated in the figure below:



(cross section not to scale)

Measurements for profile are determined according to the following formula:

$$\begin{aligned} \text{Crown} &= \frac{(h_c - h_2) + (h_c - h_3)}{2} \\ &= 0,05 \pm 0,03 \text{ mm per } 1\,000 \text{ mm width} \end{aligned}$$

For further information, contact:

ArcelorMittal South Africa, PO Box 2, Vanderbijlpark 1900. Toll free number 0800 005043

Care has been taken to ensure that the information in this data sheet is accurate. ArcelorMittal South Africa does not, however, assume responsibility for any inaccuracies or misinterpretations of this data. We are continuously engaged in product development and revised data sheets will be issued from time to time. Please ensure that you have the most recent issue. Effective date: May 2020



$$\begin{aligned} \text{Wedge} &= h_3 - h_2 \\ &= 0,04 \text{ mm max} \end{aligned}$$

$$\begin{aligned} \text{Edge drop} &= \frac{(h_2 - h_1) + (h_3 - h_4)}{2} \\ &= 0,04 \text{ mm max} \end{aligned}$$

**Note: The above values are aimed for, but not guaranteed.**

## 6. Coil appearance

The following coil appearance standards apply on Hot Rolled and Pickle & Oiled coils:

Table 6a: Temper rolled, rewound or side trimmed coils.

Description	Thickness up to 6mm
Telescopicity	40 mm max either side
Stagger wound	20 mm max
Outstanding outer wraps	20 mm max per side
Loose wraps	2 inside / 3 outside
Fishtail and Tongues	None

Table 3b: Mill Run coils. (Direct off the Hot Strip Mill.)

Description	Thickness (mm)		
	≤ 10,0	10,01 - 16,0	> 16,0
Telescopicity	50 mm max	80 mm max	90 mm max
Stagger wound	30 mm max per side	50 mm max per side	50 mm max per side
Staggered Telescope	60 mm max	60 mm max	60 mm max
Outstanding wraps	50 mm max per side	70 mm max per side	70 mm max per side
Loose wraps	2 inside / 3 outside	2 inside / 3 outside	2 inside / 3 outside
Fishtail and Tongues	500 mm max either side	500 mm max either side	500 mm max either side

## 7. Coil inside diameter

The following tolerances are applicable on inside diameters:

### Pickled & Oiled

610mm ID: -20 +15mm

### Hot Rolled

610mm ID: -20 +15mm

760mm ID: -20 +15mm (Rewind)

-40 +20mm (Mill Run)

## 8. Coil mass

For tolerances on coil mass, refer to the data sheet A2 and the relevant price lists.

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